

AADAT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10161C

Specification

AADAT Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O8N5Z0</u> <u>NP_872603.1</u>, <u>NP_057312.1</u> Human Rabbit Polyclonal Rabbit IgG 47352 196-224

AADAT Antibody (Center) - Additional Information

Gene ID 51166

Other Names

Kynurenine/alpha-aminoadipate aminotransferase, mitochondrial, KAT/AadAT, 2-aminoadipate aminotransferase, 2-aminoadipate transaminase, Alpha-aminoadipate aminotransferase, AadAT, Kynurenine aminotransferase II, Kynurenine--oxoglutarate aminotransferase II, Kynurenine--oxoglutarate transaminase 2, Kynurenine--oxoglutarate transaminase II, AADAT, KAT2

Target/Specificity

This AADAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 196-224 amino acids from the Central region of human AADAT.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AADAT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AADAT Antibody (Center) - Protein Information



Name AADAT (<u>HGNC:17929</u>)

Function Transaminase with broad substrate specificity. Has transaminase activity towards aminoadipate, kynurenine, methionine and glutamate. Shows activity also towards tryptophan, aspartate and hydroxykynurenine. Accepts a variety of oxo-acids as amino-group acceptors, with a preference for 2-oxoglutarate, 2-oxocaproic acid, phenylpyruvate and alpha-oxo-gamma-methiol butyric acid. Can also use glyoxylate as amino-group acceptor (in vitro).

Cellular Location Mitochondrion.

Tissue Location

Higher expression in the liver. Also found in heart, brain, kidney, pancreas, prostate, testis and ovary

AADAT Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

AADAT Antibody (Center) - Images



AADAT Antibody (Center) (Cat. #AP10161c) western blot analysis in HepG2,Y79 cell line lysates (35ug/lane).This demonstrates the AADAT antibody detected the AADAT protein (arrow).

AADAT Antibody (Center) - Background

This gene encodes a protein that is highly similar to mouse and rat kynurenine aminotransferase II. The rat protein is a homodimer with two transaminase activities. One activity is the transamination of alpha-aminoadipic acid, a final step in the saccaropine pathway which is the major pathway for L-lysine



catabolism. The other activity involves the transamination of kynurenine to produce kynurenine acid, the precursor of kynurenic acid which has neuroprotective properties. Two alternative transcripts encoding the same isoform have been identified, however, additional alternative transcripts and isoforms may exist.

AADAT Antibody (Center) - References

Han, Q., et al. Biosci. Rep. 28(4):205-215(2008) Rossi, F., et al. J. Biol. Chem. 283(6):3559-3566(2008) Han, Q., et al. J. Biol. Chem. 283(6):3567-3573(2008) Lamesch, P., et al. Genomics 89(3):307-315(2007) Goh, D.L., et al. Mol. Genet. Metab. 76(3):172-180(2002)